

April 28, 1997

## PETITION FOR RULEMAKING REGARDING MOTORCYCLE SIDE AND FRONT REFLECTORS

The United States Motorcycle Manufacturers Association, Inc. (USMMA) hereby petitions the administrator requesting rulemaking with respect to 49 CFR 571, Federal Motor Vehicle Safety Standard (FMVSS) Number 108. We request that FMVSS 108 be amended to reduce the minimum height of motorcycle side reflex reflectors from 380 mm (15 inches) to 300 mm. This amendment is intended to harmonize United States lighting safety standards with European and Asian reflector position regulations. This proposal will not reduce safety and will allow manufacturers to reduce costs and improve the flow of trade by creating "windows of harmonization" that allow manufacturers to market "common" vehicles in global markets. These proposals are sponsored by the USMMA and have full support of the International Motorcycle Manufacturers Association (IMMA).

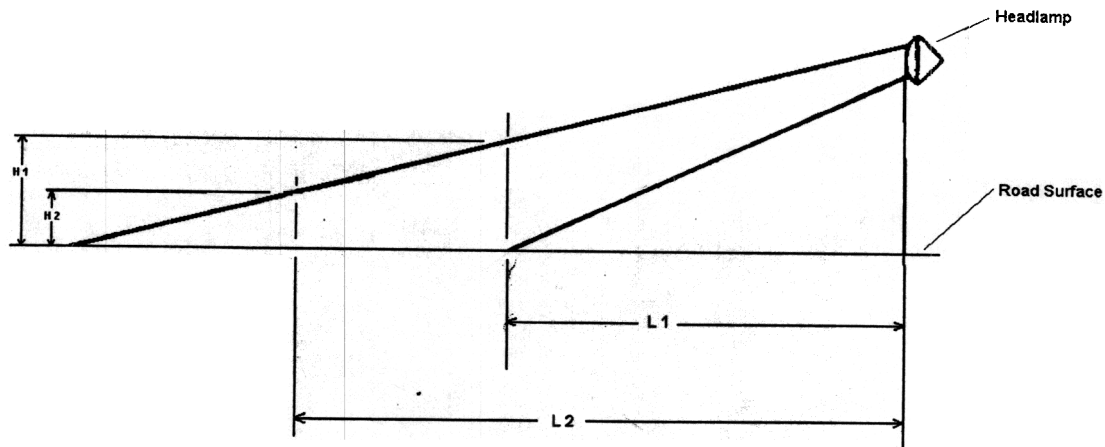
### SIDE REFLEX REFLECTOR HEIGHT

USMMA proposes to amend FMVSS 108 to reduce the minimum height of motorcycle side reflex reflectors from 380 mm to 300 mm. This height reduction not only maintains the level of safety for side reflex reflectors with regard to road surface curvature, but provides increased safety with respect to illumination by approaching vehicles.

The "American Association of State Highway and Transportation Officials" highway and street manual, "A policy on Geometric Design of Highways and Streets, 1994," considers 150 mm to be representative of the lowest visible height of an object above the road surface that can create a hazardous condition and can be perceived as a hazard by a driver in time to stop before it is reached. Accordingly, highway "crest vertical curve" recommended design practice is based on a minimum visible object height above the road surface of 150 mm. Therefore, the proposed reduction of side reflex reflector height will not reduce safety with respect to road surface curvature design.

The proposed height reduction will increase safety with respect to approaching vehicle illumination. A lower reflex reflector height will increase the distance between the motorcycle and the approaching vehicle at the point where reflex reflector illumination occurs. See illustration below:

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As can be seen, the approaching vehicle observation distance increases from L1 to L2 with a reduction in reflector height from H1 to H2 thus allowing the motorcycle to be recognized when it is farther away from the approaching vehicle resulting in increased safety.

It should also be noted that many improvements have occurred in vehicle lighting beam patterns in recent years and efforts are currently in progress to continue this trend along with activities directed towards continued lighting harmonization. These past beam pattern improvements and future harmonization programs will continue to contribute to improved visibility and vehicle safety as it relates to reflex reflector performance.

The specific changes proposed to FMVSS 571 108 are applicable to reflex reflector height as specified in Table IV - Location of Required Equipment (for vehicles less than 80 inches wide). Proposed height wording change is as follows:

Change FROM "Not less than 15 inches, nor more than 60 inches

Change TO "Not less than 300 mm. nor more than 1524 mm."

NOTE: Dimensions are shown in "mm" consistent with the NHTSA Metrification Conversion Initiative Final Rule as published in the March 14, 1995 Federal Register.

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(Continued)**

In conclusion, the USMMA believes that this proposed change will maintain or improve motorcycle safety while providing additional areas of harmonization that will contribute to reduced costs and improved trade opportunities through regulation standardization.

Yours truly,

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United States Motorcycle  
Manufacturers Association